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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,779	10/04/2004	Chi-Yuan Liu	LITP0050USA	5778

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NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION
P.O. BOX 506
MERRIFIELD, VA 22116

EXAMINER

PHAM, VAN T

ART UNIT	PAPER NUMBER
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2627

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	02/26/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/26/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

winstonhsu@naipo.com

Office Action Summary	Application No. 10/711,779	Applicant(s) LIU, CHI-YUAN	
	Examiner VAN T. PHAM	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “receiving a driving signal output from a compensator”; “transforming the driving signal to a driving signal value by an analog to digital converter”; “the look up table is stored in a read only memory”; “the compensator receiving a difference of the analog control signal and a feedback signal”; “an amplifier receiving the driving signal and outputting a driving current”; “the laser diode receiving the driving current and generating a laser beam”; and “a front monitor diode receiving the laser beam to generate the feedback signal “ must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to because Fig. 1, is labeled the element 10 as “ADC” but in the specification is labeled as “DAC”. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in

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the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 1 and 5 recite “transforming the driving signal to a driving signal value by an *analog to digital* converter” in line 5-6 of each claim, which does not describe in any Figure of invention or in specification. However, in the specification is found in paragraph [0016] indicates that “The digital control signal is transformed into an analog control signal by an digital to analog converter (DCA)”, which is not as claim.

Claims 4 and 7 recites “transforming a *digital control signal to an analog* control signal by a digital to analog circuit” in line 2-3, is *opposite* with claim 1. The same signal cannot be from an analog to digital signal and from digital to analog. However, claim 4 is consistence with the specification though.

Hence there would be undue experimentation for one of skill in the art to make and use the invention.

Claims 2-3 and 6 fall with parent claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Nanba et al. (US 5,796,704).

Regarding claim 1, the admitted prior art discloses a method of determining the time for executing optimal power calibration applied in a closed loop control circuit of a laser diode in an optical drive, the method comprising: receiving a driving signal output from a compensator (see Fig. 1, elements 20, 22); transforming the driving signal to a driving signal value by an analog to digital converter (see Fig. 1, element 10); transforming the driving signal value to a temperature value according to a look up table (see Fig. 1, elements 25, 30 and 40); and executing the optimal power calibration when the temperature value changes (see Fig. 1 and [0004]-[0007]).

Nanba discloses executing the optimal power calibration when the temperature value is higher than a predetermined temperature (see cols. 3-4).

It would have been obvious to a person of ordinary skill in the art at the time the invention provide the optimal power calibration when the temperature value is higher than a predetermined temperature in the admitted prior art as suggested by Nanba, the motivation being in order to the calibrating operation can be minimized (see Nanba col. 5).

Regarding claim 2, the combination of the admitted prior art and Nanba, discloses the method of claim 1 wherein relationships between the driving signal value and the temperature value are recorded in the look up table (see the admitted prior art [0004]-[0007]).

Regarding claim 3, the combination of the admitted prior art and Nanba, discloses the method of claim 1 wherein the look up table is stored in a read only memory (inherently).

Regarding claim 4, the combination of the admitted prior art and Nanba, discloses the method of claim 1 further comprising: transforming a digital control signal to an analog control signal by a digital to analog circuit (see [0004]); the compensator receiving a difference of the analog control signal and a feedback signal to generate the driving signal; an amplifier receiving

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the driving signal and outputting a driving current; the laser diode receiving the driving current and generating a laser beam; and a front monitor diode receiving the laser beam to generate the feedback signal (see Fig. 1).

Regarding claim 5-7, see rejection above of claims 1, 3-4, respectively.

Cited References

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited references relate to Information recording method which changes in the temperature between the time of performing the OPC and the time of recording method information (Miyaki US 7,126,896); A calibration processing unit is provided which the reproducing laser power determined by the calibration processing unit in accordance with a temperature in the apparatus (Minami et al. US 6,331,966); the reproducing laser power is calibrated, in the case where a degree of a change in temperature detected by the temperature sensor decreases as compared with the temperature at the preceding time, the calibration of the reproducing laser power at every predetermined time intervals is stopped until the temperature change exceeds a predetermined value (Nanba Us 5,796,704).

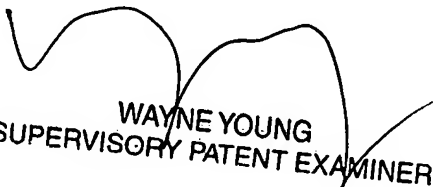
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN T. PHAM whose telephone number is 571-272-7590. The examiner can normally be reached on Monday-Thursday from 9:00am- 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP


WAYNE YOUNG
SUPERVISORY PATENT EXAMINER